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NEW SPECIES OF FUNGI FROM VARIOUS LOCALITIES.

BY J. B. ELLIS AND BENJA. M. EVERHART.

(New Series.)

ASTERINA LEPIDIGENOIDES, E. & E.—On living leaves of *Capparis Jamaicensis*, *Jacq.* Key West, Florida, May 1880. Coll. A. H. Curtis, com. A. Commons. Mycelium obsolete. Perithecia hypophyllous, scattered, attached to the scales on the leaf, small (100—120 micr.), of rather fine (not radiate) cellular structure, pierced above, scutellate. Ascii oblong, sessile, 60 x 12 micr., mostly broader below. Sporidia biserrate, fusoid, 3-septate hyaline, 12—14 x 2— $2\frac{1}{2}$.

Closely allied to *A. lepidigena* E. & M, but differs in its smaller perithecia, longer ascii and 3-septate sporidia.

ASTERINA PAUPERCULA, E. & E.—On living leaves of *Jacquinia armillaris*, *L.* Southern border of the Everglades, Florida, on coral soil. Coll. A. H. Curtis, com. A. Commons, No. 876. Epiphyllous. Perithecia scutellate, brownish-black, 90—120 micr. diam. seated on and surrounded by a thin network of brown, branching mycelium. Ascii subelliptical, 22—25 x 12—15, contracted below into a short stipe-like base, 8-spored. Sporidia crowded, fusoid, hyaline, 1-septate, 12—15 x 2.

DIMEROSPORIUM ERYSIPHEOIDES, E. & E.—On dead leaves of *Cynodon Dactylon*, *Pers.* St. Martinsville, La. Oct. 1888. Langlois 1492. Amphigenous. Perithecia scattered, astomous, globose, 100—115 micr. diam., seated on a rather scanty mycelium of slender, brown, branching hyphae and surrounded below with 15—20 short spreading appendages, 30—40 x 3, mostly 1-3-septate, brown and imperfectly bilobate at their extremities. Ascii oblong, subsessile, 35—40 x 12—14, (paraphyses)? Sporidia biserrate acutely-elliptical, 1-septate and constricted, each cell with a large nucleus, 15—18 x 6—7. With the ascigerous perithecia are many smaller ones (spermogonia)? without appendages and containing a few globose, brownish sporules 4—5 micr. diam.

There were also scattered on the mycelium some large (20 x 10) elliptical, brown, 1-septate spores but we could not ascertain whether they were produced from the threads of the mycelium or not.

DIALONECTRIA (NECTRIELLA) CONSORS, E. & E.—On dead stems of *Polygonum acre*. St. Martinsville, La., Sept. 1888. Langlois 1485.

Gregarious. Perithecia ovoid, $\frac{1}{8}$ mm. diam., light-scarlet, clothed except the obtusely conic smooth ostiolum with short spreading pale bristle-like hairs. Asci sublanceolate, 60—70 x 6. Sporidia obliquely uniseriate or biserrate, oblong-fusoid, hyaline, 2-3-nucleate, 7—9 x $2\frac{1}{2}$. Accompanied by a *Volutella* resembling *V. ciliata* but with minute oblong-cylindrical, 3—4 x 1 conidia.

DIALONECTRIA GIBBERELLOIDES, E. & E.—On dead stalks of *Zea Mays*, Pointe a la Hache, La., Oct. 1886. Langlois No. 1457.

Perithecia scattered, nearly black, 150—200 micr., contracted below into a short stipe like base, at length collapsing. Asci oblong or clavate-oblong, sessile, about 35 x 5, without paraphyses. Sporidia subbiseriate, fusoid, 1-septate, straight or a little curved at one end, yellowish-hyaline, 12—15 x $2\frac{1}{2}$ —3. The perithecia are of fine cellular structure without any trace of the blue color seen in Gibberella.

ANTHOSTOMELLA MAGNOLIÆ E. & E.—On fallen leaves of *Magnolia*. St. Martinsville, La., July '88. Langlois 1480. Perithecia gregarious, hypophyllous, immersed $\frac{1}{2}$ — $\frac{1}{2}$ mm. diam., slightly prominent and covered by the blackened cuticle, which is pierced by the papilliform ostiolum. Asci cylindrical, 75—85 x 5—6, without paraphyses. Sporidia uniseriate, oblong-elliptical, pale-brown, 2-3-nucleate, 7—8 x 3—4, with a faint, obtuse hyaline apiculus about $1\frac{1}{2}$ micr. long at the lower end and a rather shorter one at the upper end.

VALSA (EUTYPELLA) MICROCARPA, E. & E.—On decaying limbs of (peach)? St. Martinsville, La., July '88. Langlois 1481.

Perithecia in clusters of 4—12 buried in the inner bark which is uniformly stained of a pale slate color, their bases scarcely penetrating the wood, globose, about $\frac{3}{4}$ mm. diam. with thick coriaceous walls, black and shining within. The surface of the bark is raised into distinct pustules over the perithecia and is more or less cracked and pierced by the cylindrical, rough, black, 1—2 mm. long ostiola which are distinctly quadrисulcate-cleft at their tips and issue in a little fascicle with their bases more or less connate but diverging above. Asci minute, 12—14 x 4—5

(p. sp.) with a slender base. Sporidia crowded in the asci, yellowish in the mass, allantoid, strongly curved, with a nucleus in each end, $3\frac{1}{2}$ x 1 (mostly not over $3\frac{1}{2}$ micr. long.)

AMPHISPHERIA DEFORMIS, Ell. & Lang.—On an old cedar post, Pointe a la Hache, La., March '86. Langlois No. 1459.

Perithecia gregarious, erumpent, subglobose, or a little compressed, $\frac{1}{2}$ — $\frac{1}{2}$ mm. diam. black and roughish, ostiolum irregular, lacerate-depressed. Asci clavate-cylindrical, about 50 x 7, rather evanescent with obscure paraphyses. Sporidia uniseriate, oblong or clavate-oblong, brown, 1-septate and constricted, with each cell nucleate.

Melanopsamma cupressina E. & E.—(J. M. II, p. 103) much resembles this but the sporidia are hyaline and incline more to ovate.

PHOMA GLUMARUM, Ell. & Tracy,—On living glumes of *Oryza sativa*. Starkville, Miss., Oct. '88. Tracy No. 122. Perithecia erumpent-superficial, black, minute (90—120 micr.), pierced above. Sporules elliptical $3\frac{1}{2}$ x 2— $2\frac{1}{2}$; smoky-hyaline.

PHYLLOSTICTA MAXIMA* E. & E.—On leaves of *Rhododendron maximum*, Bedford, Mass., July '83. Coll. Rev. Thos. Morong, com. A. Commons.

Spots large, reddish-brown with a darker margin, mostly terminal or lateral, (3—5 cm.) Perithecia scattered, epiphyllous minute ($\frac{1}{2}$ mm.), their subacute apices slightly prominent. Sporules globose-elliptical, hyaline, granular, 10—12 x 6—8 on rather slender pedicels about equal in length to the diameter of the sporule. The fruit is much like that of *P. sphaeropsoidea*, E. & E. and the habit that of *P. terminalis*, E. & M.

DIPLODINA KÆRBERLINIAE, E. & E.—On *Kærberlinia spinosa*, Arizona, June '81. Coll. C. G. Pringle, com. A. Commons. Perithecia gregarious, subcuticular, $\frac{1}{2}$ mm. diam. rupturing the epidermis but not erumpent. Sporules elliptical, hyaline 14—16 x 7—8, the endochrome imperfectly divided across the middle.

VERMICULARIA HIBISCINA, E. & E.—On dead *Hibiscus Manihot*, Pointe a la Hache, La., Jan. '86. Langlois No. 1458. Perithecia erumpent, subseriate, $\frac{1}{2}$ mm. diam. densely clothed with black bristles 80—100 x 4. Conidia falcate-fusoid, 15—20 x 3—4.

PESTALOZZIA MAURA, E. & E.—On leaves of PSYCHOTRIA RUFESCENS, H. B. K. Halifax River, Fla., (A. H. Curtis No. 1121). A. Commons No. 881. Perithecia amphigenous, subprominent, black, minute, on round reddish-brown spots 2-3-mm. diam.

Conidia obovate, acute below, 3-septate, quite dark, almost opaque, $12-15 \times 6-8$, with a crest of three horizontally spreading bristles $15-20$ micr. long arising without any very distinct hyaline apical cell directly from the obtuse apex, basal hyaline cell small, acute terminating in a hyaline pedicel shorter than the conidia.

SPORIDESMIUM FUNEREUM, Ell. & Lang.—On rotten pieces of an old coffin taken from a brick tomb. Pointe a la Hache, Feb. '86. Langlois No. 1456. Effused, pulverulent, snuff-brown. Conidia globose, $10-15$ micr. muricate-roughened, mostly 4-parted by two vertical septa at right angles and furnished with a short (often obconic) hyaline pedicel below. Allied to *S. Moriforme*, *Pk.* & *S. Rauii*, *E.* & *H.*

HAPLOGRAPHIUM GRISEUM, Ell. & Lang.—On decaying corn stalks. Pointe a la Hache, La. July '86. Langlois 1464. Effused, dirty gray. Fertile hyphae sub-fasciculate or solitary, pale brown, faintly septate, $150-200 \times 4$, simple or sometimes forked about midway, subdichotomously branched above, the branches erect and forming a compact, brush-like head about 30 micr. long and half that wide. Conidia terminal, oblong, hyaline, $4-5 \times 1\frac{1}{2}$. The branches are not verticillate.

BOTRYTIS FUNICOLA, E. & E.—On an old rope lying on the ground, Newfield, N. J., Oct. Hyphae subolivaceous, simple or sparingly branched below, continuous, $20-30 \times 2-2\frac{1}{2}$, forming a thin dark olive colored stratum. Conidia terminal (solitary)? olivaceous, ovate-elliptical, uninucleate, $3-4 \times 2-2\frac{1}{2}$. Comes near *B. atroviridis*, *C.* & *E.*

FUSICLADIUM CARYIGENUM, Ell & Lang.—On living leaves of *Carya olivæformis* St. Martinsville, Sept. '88. Langlois No. 1499. Hypophyllous and maculicolous. Spots, numerous, small, ($1-2$ mm.) but also larger ($3-5$ mm.) and then of irregular shape, subangular; center grayish-white, margin purple-shaded. Hyphae simple or somewhat branched below, olive-black, septate, $60-75 \times 4-5$, subequal. Conidia terminal, almond-shaped varying to ovate and clavate-ovate, smoky-olivaceous. $10-15 \times 6-7$.

This can hardly be separated from *F. effusum* Winter by its microscopical characters but its epiphyllous, maculicolous growth and darker colored (almost black) hyphae will distinguish it.

F. effusum is also found on *Carya olivæformis* (Langlois 1369).

NEW LITERATURE.

Bennett, J. L., Plants of Rhode Island—an enumeration of the plants growing without cultivation in the State of Rhode Island—includes a list of about 600 Fungi, (8 vo., 128 pp. Proc. Providence Franklin Society, 1888.

Lagerheim, Dr. G. Eine neue *Entorrhiza*. Separat abdruck aus *Hedwigia* 1888, Heft 9 and 10.

" Mykologiska Bidrag. VI. Ueber eine neue auf *Juncus*-Arten wachsende Species der Gattung *Urocystis*.

Macoun, Dr. John. Catalogue of Canadian Plants. Part IV.—*Endogens*. 248 pp. 8 vo. (enumerating about 750 species).

Trelease, Prof. Wm. Morels & Puff Balls of Madison, Wis. From the Transactions of the Wisconsin Academy of Sciences, Arts and Letters, Vol. VII, issued 1888.

" *Lycoperdon Missouriense*. Trans. St. Louis Acad. Sci. V. 240. Pl. VIII. (Reprint.)

Saccardo, Dr. P. A. Sylloge Fungorum Omnium hucusque cognitorum. Vol. VII. pars. II. *Ustilagineæ et Uredineæ*. Auctore Doct. J. B. De Toni Patavii, Oct. 1888, pp. 882, with descriptions of 1508 species,

" Funghi delle Ardenne contenuti nelle Cryptogamæ Ardennæ della Signora M. A. Libert. (Estratto dalla *Malpighia*, Anno I, Fasc. V.)

FLORIDA LICHENS.

By a letter from our friend Col. W. W. Calkins, who spends several months of each winter in Florida, we are pleased to learn that since the publication of "The Lichen-Flora of Florida" by Eckfeldt & Calkins in the JOURNAL OF MYCOLOGY, he has added very nearly *forty* species to the *three hundred and thirty* there enumerated, while still a large number remain to be positively identified before being added. Many are new species. In all over thirty species of Florida Fungi and Lichens new to science can be placed to his credit. To supply the demand which has arisen Col. C. will furnish named sets of 100 or more species at 5 cents per species.

Address W. W. Calkius, 147 California Ave., Chicago, Ill.—after Dec. 25th Jacksonville, Fla.

NOTICE:

Arrangements have been made to have THE JOURNAL OF MYCOLOGY published as a Quarterly during the coming year (1889) at Washington, edited under the direction of the Commissioner of Agriculture, by B. T. Galloway, Chief of the Section of Vegetable Pathology, assisted by J. B. Ellis and Benja. M. Everhart. The Journal will be distributed free to all the present subscribers and others interested in mycological studies.

Copies of Vols. I, II, III and IV will be sent to any address, postpaid, on receipt of \$5.20; or the vols. may be had separately —Vol. I, \$2.00, and the other three vols. \$1.25 each.

Send all orders hereafter to

J. B. ELLIS,
Newfield, N. J.

INDEX TO ARTICLES.

Agaries of the United States,—Genus Panus, Edward J. Forster....	21
Cercospora and Ramularia, additions to, J. B. Ellis and B. M. Everhart	1
Corrections.....	71, 83, 95, 119
De Toni, J. B., Revision of the Genus Doassansia Cornu.....	13
Ellis, J. B. and Everhart, B. M., Additions to Ramularia and Cercospora	1
Ellis, J. B. and Everhart, B. M., New Species of Fungi from various Localities.....	9, 44, 49, 62, 73, 97, 115
Ellis, J. B. and Everhart, B. M., Synopsis of North American Species of Hypoxylon and Nummularia.....	38, 66, 85, 109
Ellis, J. B. and Halsted, B. D., New Iowa Fungi.....	7
Ellis, J. B. and Kellerman, W. A., New Kansas Fungi.....	26
Everhart, B. M. and Ellis, J. B., Additions to Ramularia and Cercospora,	1
Everhart, B. M. and Ellis, J. B., New Species of Fungi from various Localities	9, 44, 49, 62, 72, 97, 115
Everhart, B. M. and Ellis, J. B., Synopsis of North American Species of Hypoxylon and Nummularia.....	38, 66, 85, 109
Forster, Edward J., Agaries of the United States—Genus Panus....	21
Galloway, B. T. and Tracy, S. M., New Western Uredineæ.....	20
“ “ “ “ Notes on Western Uredineæ	61
Halsted, B. D. and Ellis, J. B., New Iowa Fungi.....	7
Kellerman, W. A. and Ellis, J. B., New Kansas Fungi.....	26
Kellerman, W. A., New Literature.....	10, 29, 47, 59, 71, 82, 119
Kellerman, W. A. and Swingle, W. T., New Species of Kansas Fungi	93
Lichen, new to the United States, Eugene A. Rau.....	20

New Iowa Fungi, J. B. Ellis and B. D. Halsted.....	7
New Kansas Fungi, J. B. Ellis and W. A. Kellerman.....	26
New Literature, W. A. Kellerman,.....	10, 29, 47, 59, 71, 82, 119
New Species of Fungi from various localities, J. B. Ellis and B. M. Everhart.....	9, 44, 49, 62, 73, 67, 115
New Species of Kansas Fungi, W. A. Kellerman and W. T. Swingle	93
New Western Uredineæ, S. M. Tracy and B. T. Galloway.....	20
Notes on Fungi from Western Kansas, W. T. Swingle.....	27
Notes on Western Erysipheæ and Peronosporeæ, S. M. Tracy and B. T. Galloway.....	33
Notes on Western Uredineæ, S. M. Tracy and B. T. Galloway.....	61
Pammel, L. H., some Mildews, of Illinois.....	36
Ramularia and Cercospora, additions to, J. B. Ellis and B. M. Everhart	1
Rau, Eugene A., a Lichen new to the United States.....	20
Revision of the Genus Doassansi, J. B. De Toni.....	13
Saccardo's Sylloge.....	107
Some Mildews of Illinois, L. H. Pammel.....	36
Swingle, W. T., Notes on Fungi from Western Kansas.....	27
Synopsis of North American Species of Hypoxylon and Nummularia, J. B. Ellis and B. M. Everhart.....	38, 66, 85, 109
Tracy, S. M. and Galloway, B. T., New Western Uredineæ.....	20
Tracy, S. M. and Galloway, B. T.—Notes on Western Erysipheæ and Peronosporeæ	33
Tracy, S. M. and Galloway, B. T., Notes on Western Uredineæ....	61

INDEX TO DESCRIBED SPECIES.

PAGE.	PAGE.
*Æcidium Drabæ, Tracy & Gal..... 21	Caeoma ribes-alpini, Wint..... 61
" Ellisii, Tracy & Gal..... 21	Capnodium pucciniooides, EE..... 65
" Fumariacearum, KS..... 95	Caryospora Langloisii, EE..... 79
" Heliotropii, Tracy & Gal..... 21	Ceratosphaeria microdoma, EE..... 78
" Lepidii, Tracy & Gal..... 21	Cercospora anomala, Ell & Hals..... 8
" tuberculatum, EK..... 27	" Asclepiadorae, EK..... 6
Alternaria lancipes, EE..... 45	" atra, EE..... 4
Amerosporium economicum, ET..... 102	" brachiata, EE..... 5
" ilicinum, EE..... 50	Callae, Pk & Cl..... 6
" macrochate, EE..... 50	Ceanothi, KS..... 94
" sabalinum, EE..... 50	Cephalanthi, EK..... 5
Amphisphæria deformis, Ell & Lang..... 123	" chamaecrista, EK..... 7
Anthostomella Magnoliae, EE..... 122	" coffeicola, BC..... 5
Asterina lepidigenoides, EE..... 120	" Cucurbitae, EE..... 2
" paupercula, EE..... 120	" Daleae, EK..... 6
Botryosphaeria minor, EE..... 77	" Deutzia, EE..... 5
Botrytis fasciculata, EE..... 105	" diffusa, EE..... 3
" funicola, EE..... 124	" dispersa, EE..... 115
" griseo-lilacina, EE..... 45	" fraxinea, EE..... 4
" rhinotrichoides, Sacc & Ell..... 105	" gentianicola, EE..... 2
" tephroidea, Sacc Ell..... 105	" Helianthi, EE..... 6
Byssosphaeria barbicincta, EE..... 63	" Heliotropii, EE..... 5
" luteobasis, Ell..... 63	" helvola, Sacc..... 7

*In this Index E. & E., E. & K., &c., will be written EE., EK., &c., as the printer lacks the requisite number of the character &.

PAGE.	PAGE.
Cercospora Ipomoeae, Winter.....	7
" latens, Ell.....	3
" lateritia, Ell & Hals.....	7
" leucosticta, EE.....	53
" Lycii, Ell & Hals.....	7
" Malii, EE.....	116
" Malloti, EE.....	114
" Menispermii, Ell & Hol.....	6
" nubilosa, EE.....	115
" obesa, EE.....	5
" Oxybaphi, Ell & Hals.....	8
" pachypus, EK.....	7
" penicillatus, EE.....	115
" Sabbatiae, do.....	3
" Scutellariae, do.....	54
" sedoides, do.....	4
" sminalis, EE.....	4
" Silphii, EE.....	3
" subsanguinea, EE.....	4
" tabacina, EE.....	6
" verbascicola, EE.....	3
" Texensis, Ell & Gall.....	116
" tuberculans, EE.....	115
Chætomium canium, EE.....	79
Chloridium glaucum, EE.....	113
Chrysomyxa albida, Kuhn.....	62
Clavaria sphærospora, EE.....	74
Ccelosphaeria fusariospora, EE.....	65
Colletotrichum carpophilum, K & S.....	94
Coniosporium gramineum, EE.....	106
Coniothyrium salviicolum, EE.....	49
Corticium pezizoides, EE.....	74
Cylindrosporium Geranii, EE.....	52
" Heraclei, EE.....	52
" Iridis, Ell & Hals.....	8
Cyphella trachycheta, EE.....	73
Daldinia cingulata, (Lev.).....	112
" concentrica, (Bolt.).....	111
" loculata, (Lev.).....	113
" vernicosa, (Schw.).....	112
Dendrodochium densipes, Sacc & Ell.....	117
" simile, EE.....	117
Dendryphium acinorium, EE.....	114
" cladosporioides, EE.....	114
" nubilosum, EE.....	114
Dermatea pruinosa, EE.....	100
" purpurascens, EE.....	100
Dialonectria consors, EE.....	122
" gibberelloides, EE.....	122
" perforata, Ell & Hol.....	57
" sulfurea, Ell & Calk.....	57
Diatrype acervata, EE.....	75
" pustulans, EE.....	80
Diatrypella decipiens, EE.....	80
" Tocciaeana, DeNot, var subeffusa, EE.....	62
Dimerosporium erysipheoides, EE.....	121
Dinemasporium radiatum, EE.....	103
Diplodina Koerberliniae, EE.....	123
Doassansia Cornu.....	13
Doassansia Alismatis (Nees).....	14
" Comari (BB).....	18
" decipiens, Winter.....	17
" Epilobii, Farlow.....	18
Doassansia Farlowii, Cornu.....	16
Doassansia Hottoniae (Rostr).....	18
" Limosellae (Kunze).....	17
" Martianoffiana (Thum).....	16
" Niesslii, De Toni.....	17
" occulta (Hoffm).....	16
" punctiformis, Winter.....	17
Doassansia punctiformis (Niessl).....	17
Doassansia Sagittariae (West).....	15
Dothidea Alismatis, Lasch.....	14
Dothiorella decorticata, RE.....	50
Entyloma Alismacearum, Sacc.....	14
Entyloma Bizzozerianum, Sacc.....	15
Entyloma Hottoniae, Rostr.....	18
Entyloma Limoselle, Winter.....	17
Erysiphe graminis, DC.....	35
Fenestella Amorphae, EE.....	58
Fuckelia Morsei, Cke.....	67
Fusarium barbatum, EE.....	45
" hydnicolum, EE.....	45
Fusiciadium ascyrinum, EE.....	53
Fusiciadium Alopecuri, EE.....	53
" caryigenum, Ell & Lang.....	124
Fusidium roseum, Fckl.....	2
Geaster campestris, Morgan.....	10
" delicatus, Morgan.....	11
Gleosporium apocryptum, EE.....	52
" Equiseti, EE.....	52
" necans, EE.....	104
" Opuntiae, EE.....	52
" podophyllinam, EE.....	103
" profusum, EE.....	104
" Rubi, EE.....	52
Gnomyonia tenella, EE.....	80
" emarginata, Fckl.....	81
Haplographium griseum, Ell & Lang.....	124
Harknessia affinis, EE.....	51
Helotium lacteum, EE.....	56
" strumosum, EE.....	56
" rhizogenum, EE.....	100
Helminthosporium hadotrichoides,	44
Helminthosporium subcuticulare, EE.....	114
" subolivaceum, EE.....	44
Hendersonia Celtidis, EE.....	102
Hypocreëa bicolor, EE.....	58
Hypomycetes pannosus, Schw.....	74
Hypoxylosporus annulatum, (Schw).....	68
" argillaceum, (Pers).....	41
Hypoxylosporus atrofuscum, BC.....	111
" atropunctatum, Schw.....	89
" atropurpureum, Fr.....	87
" Beaumontii, BC.....	91
" bicolor, EE.....	42
" botrys, Nitschke.....	41
" Broomeianum, BC.....	38
" callostroma, Schw.....	69
" caries, Schw.....	110
" Catalpae, Schw.....	85
" coccineum, Bull.....	39
" cohaerens, Pers.....	43
" colliculosum, Schw.....	93
" commutatum, var. Hol- wayanum.....	40
" concurrens, BC.....	91
" Culmorum, Cke.....	79
" crocopeplum, BC.....	89
" crustaceum, Nitsch.....	91
" decorticatum, Schw.....	67
" durissimum, (Schw).....	69
" effusum, Nitsch.....	91
" enteromelum, (Schw).....	40
" epiphleum, BC.....	66
" epihodium, B & Rav.....	90
" exiguum, Cke.....	68
" Fendleri, Berk.....	87
" florideum, BC.....	88
" fuscopurpureum, Schw.....	88
" fuscum, (Pers).....	41
" glomiforme, BC.....	43
" Hyalwayi, Ell.....	67
" Howesianum, Pk.....	39

PAGE.	PAGE.
Hypoxylon ianthinum, Cke..	89
do illitum, Schw..	109
do insidens, Schw..	93
do investiens, Schw..	110
do jecorinum, B & Rav..	88
do leucocreas, B & R..	68
do malleolus, B & R..	43
do marginatum, Schw..	69
do minutum, Cke..	87
do Morsei, B & C..	67
do multiforme, Fr..	42
do Murrayi, B & C..	43
do notatum, B & C..	41
do obesum, Fr..	109
do ovinum, Berk..	39
do pallidum, EE..	68
do Peckianum, Sacc..	66
do perforatum, Schw..	86
do Petersii, BC..	39
do piceum, Ell..	88
do polyspermum, Mont..	69
do pruinatum,(Klotzsch)..	67
do punctulatum, B & Rav..	90
do ramosum, Schw..	85
do Ravenelii, Rehm..	110
do rubiginosum, Pers..	86
do Sassafras, Schw..	70
do serpens, (Pers.)..	92
do smilacicolum, Howe..	70
do stigmatum, Cke..	89
do subchlorinum, Ell & Calk..	86
do suborbiculare, Pk..	67
do teres, Schw..	43
do tinctor, Berk..	90
do transversum, Schw..	85
do turbinatum, Schw..	43
do Vera Crucis, BC..	40
do xanthocreas, BC..	66
do xanthostromum, Schw..	85
Isaria straminipes, EE.....	117
Leptothyrium castanicolum, EE..	103
Leptosphaeria filamentosa, EE..	76
do Tim, EE..	64
Lophiostoma excipuliforme, Fr.; var;	
Abietis, EE.....	64
do hysteriooides, RE..	76
do implexum, EE..	75
do meridionale, do..	76
do minimum, do..	75
do Montaniense, do..	64
do Pruni, do..	64
Macrophoma Xanthoxyli, do..	102
Melampsora Lini, Wint..	61
Melasma Gleditschiae, EE..	45
Metasphearia punctulata, EE..	76
Monilia penicillata, do..	54
Mystrosporium erectum, do..	53
Mytilinidion Juniperi, do..	57
Napicladium Astragali, do..	114
Nectria Missouriensis, do..	57
do polythalamia, Berk..	57
Ophiobolus consimilis, EE..	77
Panus alliaceus, BC.....	25
do angustatus, Berk..	25
do conchatus, Fr..	22
do dealbatus, Berk..	24
do dorsalis, Bosc..	24
do farinaceus, Schum..	23
do foetens, Secr..	24
do laevis, BC..	23
do operculatus, BC..	25
do salicinus, Peck..	26
do stipticus, Fr..	23
Panus strigosus, BC.....	22
do tomentosus, Bundy.....	23
do torulosus, Fr.....	22
Parodiella fruticola,.....	97
Parodiella rigida, EE.....	62
Patellaria cenangicola, EE.....	56
Perisporium Alismatis, Fr.....	14
Pestalozzia adusta, EE.....	51
do cornifolia, EE.....	51
do discoidoides, do.....	51
do kalmicola, do.....	51
do microspora, do.....	46
do maura, do.....	123
do pallida, do.....	46
do pallida, EM.....	104
do taphrinicola, EE.....	104
Peziza brachypus, EE.....	55
do callochætes, do.....	99
do clavigera, do.....	100
do Fairmani, do.....	56
do frondicola, do.....	99
do glagosa, do.....	56
do hystricula, do.....	99
do prinicola, do.....	99
do Rhizomorpha, EE.....	98
do solenaeformis, do.....	55
do venturioides, do.....	99
Phleospora Caricis, do.....	49
do Chemopodii, EK.....	26
Phoma glumarium, Ell & Tracy.....	123
do infossa, EE.....	102
do Lagerstroemiae, EE.....	101
do Mamillariae, do.....	102
do parasitica, do.....	102
do urens, do.....	102
do Virginiana, Ell & Hals.....	8
Phyllachora Tracyi, EE.....	63
Phyllosticta Antennariae, EE.....	9
do Celtidis, EK.....	27
do Caryae, EE.....	101
do concomitans, EE.....	9
do fagicola, Ell & Morgan.....	10
do hibiscina, EE.....	9
do Lagerstroemias, EE.....	101
do Linderae, EE.....	9
do marginalis, EE.....	9
do maxima, do.....	123
do Meliae, do.....	9
do orbicularis, do.....	10
Physalacria Langloisii, do.....	73
Physalospora Sesbaniae, do.....	77
Physoderma maculare, Wallr.....	15
Physoderma sagittariae, Fckl.....	15
Pleospora lactucicola, EE.....	64
do pustulans, do.....	76
Polyscytalum cylindroides, S & E.....	105
Protomyces Bizzozerianus, Sacc.....	15
do Comari, B & Br.....	18
do Limosellae, Kunze.....	17
do macularis, Fckl.....	14
do Martianoffianus, Thum.....	16
do punctiformis, Niessl.....	17
do Sagittariae, Fckl.....	15
Puccinia balsamorrhiza, Pk.....	61
Puccinia caulincola, Tracy & Gal.....	20
do flosculosorum, Wint.....	61
do fragilis, Tracy & Gal.....	20
do verti-septa, Tracy & Gal.....	21
do Schedonnardi, K & S.....	95
Pyrenophora hyphasmatis, EE.....	77
Ramularia concomitans, Ell & Hol.....	2
do Crepidis, EE.....	46
do Liriiodendri, EE.....	2

	PAGE.		PAGE.
Ramularia rosea (Fckl)	2	Sporidesmium funereum, Ell & Lang	124
do Sidalceæ, EE.	1	Stachybotrys atrogrisea, EE.	106
do subrufa, Ell & Hol	2	Stagonospora Myricæ, do	103
do Veronicae, Fckl.	1	do septorioides, do	45
Rossellinia pruinata, (Kl) Sacc	67	Stictis niveo-purpureus, do	101
Sclerotium Alismatis, Nees.	14	do parasitica, EE.	54
Septoria asclepiadicola, EE.	44	Stilbum capillare, do	46
do Atriplicis, (Desm.)	117	do coprogenum, do	116
do cassiaceola, K & S.	94	do sebaceum, do	116
do Chenopodiæ, West.	117	Streptothrix glauca, do	107
do Citrulli, EE.	102	Strunella dealbata, do	50
do gallarum, EE.	103	Teichospora pygmaea, do	63
do Glycyrrhizeæ, E & K.	27	Thyridia eutypoides, EE.	78
do lupulina, E & K.	27	Trichobasis balsamorrhizae, Pk.	61
do Nepeteæ, EE.	44	Uncinula geniculata, Ger.	37
do Saniculae, EE.	44	Uredo Alismacearum, Crouan.	14
do Thalictri, EE.	49	do Jonesii, Pk.	61
Sordaria Iowana, Ell & Hol.	65	do Sagittariae, West.	15
do penicillata, EE.	78	Uromyces Arizona, Tracy & Gal.	20
do striata, EE.	79	Ustulina vulgaris, Tul.	113
Sphaerella applanata, EE.	98	Valsa capitata, EE.	74
do asterinoïdes, do	98	do deusta, EE.	74
do Opuntiae, do	97	do microcarpa, EE.	122
do phlogina, do	65	do pallida, EE.	58
do Spartinae, do	97	Vermicularia hibiscina, EE.	123
Sphæria argillacea, Pers.	41	do sanguinea, Ell & Hals.	8
do Cacti, Schw.	65	do sparsipila, E & K.	27
do enteromela, Schw.	40	do velutina, EE.	54
do fragimoris, Pers.	39	Verticillium dichotomum, EE.	105
do pruinata, Kl.	67	Volutella citrina, EE.	55
Sphaerotheca leucotricha, EE.	58	Volutella conorum, EE.	55
do phytoptrophila, K & S.	93	Zygodesmus membranaceus, EE.	54
Sporidesmium fumosum, EE.	53	Zygodesmus trachychaetes, EE.	106

INDEX OF HOST PLANTS.

	PAGE.		PAGE.
Abies.	64	Bidens.	1-2
Acer.	86	Birch.	25, 39, 41, 42
do macrophyllum.	91	Blitum capitatum.	117
do rubrum.	44, 80, 81, 88	Branches.	15
do saccharinum.	67	Buchloe dactyloides.	4
Actinomeris squarrosa.	8	Butomus umbellatus.	17
Agaricus.	57	Callirhoe involucrata.	26
Ailanthus glandulosa.	28	Carex angustata.	49
Alisma plantago.	15	Carpinus.	67
Alopecurus geniculatus.	53	Carya.	74, 101
Alnus.	42, 66, 67	do alba.	57
Amaranthus retroflexus.	5	do olivaeformis.	117
Ambrosia trifida.	105	Cassia chamaecrista.	7, 94
Ammophila longifolia.	100	Castanea.	42
Andropogon.	100	do vesca.	103
Antennaria plantaginifolia.	9	Catalpa.	85
Argemone platyceras.	45	Ceanothus.	95
Arenaria pungens.	20	Cedar.	117
Arundinaria.	70, 79, 80, 106	Celtis.	41
Asclepias.	44	do occidentalis.	102
Asclepiadura viridis.	6	Cenangium turgidum.	56
Ascyrum crux-Andreae.	53	Cephalanthus.	5
Ash.	4, 41, 86	Chenopodium.	118
Astragalus caryocarpus.	94	do album.	21, 26
do chamaeleuce.	114	do murale.	118
do flexuosus.	114	Chestnut.	40, 100
Atriplex hastata.	118	Chinese Mat.	78
Balsamorrhiza sagittata.	61	Citrullus.	102
Bark.	43, 56, 67, 69, 87, 88, 89, 92, 95, 100	Clematis ligusticifolia.	64, 97, 98
Bean.	74	Clover.	105, 107
Beech.	22, 25, 39, 41, 43, 86	Cnicus.	5
Betula.	67	Coffee leaves.	5
do carpinifolia.	85	Comarum palustre.	18

PAGE.	PAGE.
Cornus sericea.....	.51
Corydalis aurea.....	104
Corylus Americana.....	104
Cotton cloth.....	63, 65
Cottonwood.....	102
Cow pea.....	46
Crepis glauca.....	10
Cucurbita pepo.....	3
Cucurbita perennis.....	6
Dalea laxiflora.....	5
Deutzia gracilis.....	5
Diatrype tremellophora.....	54, 63
Dichaena strumosa.....	56
Diospyrus Virginiana.....	4
Dipsacus.....	98
Distichlis Maritima.....	63
Dog dung.....	79
Draba aurea.....	21
Dung.....	116
Elm.....	24
Elymus condensatus.....	35
Epilobium alpinum.....	18
Equisetum laevigatum.....	52
Eragrostis major.....	44
Eriogonum racemosum.....	20
Fagus ferruginea.....	10
Fraseria speciosa.....	65
Fraxinus.....	76, 182
Fraxinus viridis.....	116
Galls.....	103
Gaylussacia.....	99
Gentiana crinita.....	2
Geranium Carolinianum.....	52
Gleditschia triacanthus.....	45
Glycerrhiza lepidota.....	27
Grapes.....	114
Hazel.....	41
Helianthus doronicoides.....	6, 28
Helianthus lenticularis.....	7
Helianthus petiolaris.....	29
Helianthus rigidus.....	6
Heliotropium curassavicum.....	5, 21
Hemlock.....	23
Heracleum lanatum.....	52
Hibiscus mutabilis.....	9
Hickory.....	23, 57, 58
Horse dung.....	65
Hottonia palustris.....	18
Humulus lupulus.....	27
Hydnium membranaceum.....	45
Ilex decidua.....	9, 50
Ipomoea pandurata.....	7
Iris.....	8
Juniperus Virginiana.....	57
Kalmia latifolia.....	51
Lactuca Canadensis.....	64
Lagerstroemia Indica.....	101
Laurus aestivalis.....	66
Leaf.....	56
Lepidium montanum.....	21
Limbs.....	74, 86, 90
Limnanthemum lacunosum.....	18
Limosella aquatica.....	17
Lindera Benzoin.....	9
Linum perenne.....	61
Liquidambar styraciflua.....	51
Liriodendron.....	86
Liriodendron Tulipiferae.....	2
Logs.....	38, 90, 105, 109, III, 112, 113
Lycium vulgare.....	7
Lythrum hyssopifolium.....	17
Magnolia glauca.....	55, 66
Magnolia grandiflora.....	99
Mallotus Japonicus.....	114
Mamillaria vivipara.....	102
Maple.....	86
Melia.....	78
Melia Azedarach.....	9, 53
Menispermum Canadense.....	8
Morus rubra.....	37
Myrica.....	69
Myrica cerifera.....	99, 103, 115
Negundo aceroides.....	52, 114
Nepeta cataria.....	44
Nyssa.....	25
Oak.....	22, 23, 24, 39, 40, 43, 45, 55, 68, 69, 73, 76, 85, 86, 89, 90, 93, 101, 110, 113
Okra.....	77
Opuntia.....	97
Opuntia Brasiliensis.....	52
Opuntia Engelmanni.....	65
Osmunda.....	99
Oxybaphus nyctaginea.....	8
Panicum.....	8
Panicum Curtissii.....	76
Peltandra Virginica.....	6
Penthorthum sedoides.....	4
Phlox longifolia.....	65
Physalis lanceolata.....	3
Pine.....	24, 55, 106
Pinus rigida.....	62
Platanus.....	109
Pitma.....	40, 51
Podophyllum peltatum.....	103
Poplar.....	50, 63, 67, 102
Potamogeton gramineus.....	16
Potamogeton lucens.....	16
Potamogeton natans.....	16
Potamogeton perforatus.....	16
Potamogeton pusillus.....	16
Potamogeton Vaseyi.....	16
Prunus serotina.....	64
Prunus Virginiana.....	8
Psoralea argophylla.....	3
Pteris aquilina.....	104
Pirus malus.....	67, 116
Quercus.....	42, 69, 86
Quercus alba.....	49, 53, 104
Quercus aquatica.....	9, 105
Quercus coccinea.....	46, 56, 63, 102, 104
Quercus imbricaria.....	45
Quercus nigra.....	43
Quercus Primus.....	99
Quercus rubra.....	63
Quercus vires.....	105
Rhizomorpha.....	98
Rhus glabra.....	111
Rhus Toxicodendron.....	28
Rhynchospora macrostachya.....	50
Ribes aureum.....	61
Roses.....	51, 90
Rubus occidentalis.....	62
Rubus villosus.....	52
Rudbeckia triloba.....	6
Sabal Palmetto.....	50
Sabbatia angularis.....	3
Sagittaria Montevideensis.....	16
Sagittaria sagittifolia.....	16
Sagittaria variabilis.....	16
Salix.....	58, 110, 117
Salix discolor.....	26
Salix nigra.....	25
Salix rostrata.....	2
Salvia ballotaeifolia.....	21
Salvia lanceolata.....	20
Salvia officinalis.....	49

	PAGE.		PAGE.
Sambucus.....	78	Tilia.....	87
Sambucus pubens.....	7	Tomato.....	206, 214
Sanicula Marylandica.....	44	Trichia.....	46
Sassafras.....	70	Trichia varia.....	46
Schedonardus Texensis.....	95	Trifolium pratense.....	105
Scutellaria versicolor.....	54	Trifolium repens.....	7
Sesbania.....	77	Twigs.....	58, 117
Sesbania macrocarpa.....	77, 98	Ulmus Americana.....	58, 91, 117
Sidalcea.....	1	Ulmus fulva.....	58
Silphium integrifolium.....	3, 29	Umbellularia.....	80
Smilacina Canadensis.....	4	Usnea barbata.....	45
Smilax.....	2, 70, 115	Verbascum Thapsus.....	3
Solidago.....	103	Veronica peregrina.....	1
Sorbus.....	42	Viburnum Tinus.....	64
Sorghum Halapense.....	5	Viola odorata.....	104
Spartina cynosuroides.....	97	Watermelon.....	102
Sphagnum.....	105	Weed.....	79
Stemonitis	105	Willow.....	39, 41
Stems.....	54	Wood.....	39, 40, 50, 54, 55, 56, 67, 68, 69, 73,
Stereum rugosum.....	57		74, 75, 76, 87, 88, 91, 92, 95, 110
Stereum spadiceum.....	116	Xanthoxylum.....	102
Taphrina coerulescens.....	102, 104	Yucca filamentosa.....	75, 76
Thalictrum purpurascens.....	49	Zea Mays.....	53

CORRECTIONS.

On page 46 (vol. IV,) *Pestalozzia pallida*, E. & E. should be *Pestalozzia pallida*, E. & M. It was repeated on page 104 by mistake.

In *Cylindrosporium Apocyni*, E. & E., J. M. III, p. 22, the spores are only $3 - 3\frac{1}{2}$ micr. thick instead of "4—5 micr."

In Journ. Mycol. III, p. 21, change *Gloeosporium punctiforme* E. & E. to *G. Everhartii*, Ell., as there is already a *G. punctiforme* S. & E. on *Phormium tenax*.